



March 15, 2012

FCC Notice of Proposed Rulemaking

Submitted electronically Via FCC Docket

Docket No: **11-202, FCC 11-185**

Private Land Mobile Radio Service Regulations

Delphi Automotive appreciates the opportunity to submit comments to FCC's Private Land Mobile Radio Service NPRM which proposes to amend the Commission's rules to permit radiolocation operations in the 78-81 GHz band. Delphi is a leading global supplier of mobile electronics and transportation systems, including powertrain, safety, thermal, electrical/electronic architecture, controls and security systems.

Headquartered in Kokomo, Indiana, Delphi's Electronics and Safety division, is a leader and innovator in the design and manufacture of vehicular radar systems and has actively and consistently participated in the rulemaking process for several of FCC's rulemakings affecting such devices in recent years. Delphi has obtained a number of FCC authorizations for sale of nonlicensed Part 15 automotive radar products at 10 GHz, 17 GHz, 24 GHz and 76 GHz.

Delphi agrees with the commission that foreign object debris (FOD) at airports is an application that is in the public interest. However, operation in the 78-81 GHz band for the specific application of FOD at airports should not pose a problem with other potential safety applications if approved as a licensed device operating under Part 90 of the Commission's rules at appropriate maximum power levels.

Delphi also believes that the final resolution of this rule making procedure is a complex issue that requires close coordination with RM-11555 (Reference ET Docket Nos. 11-90 and 10-28). In this rulemaking procedure, it is proposed to allow use of the 76-77 GHz band for unlicensed use of fixed radar for monitoring ground based vehicle motion at airports under Part 15 of the Commission's rules. In September 2009, the Commission granted a waiver to 15.253 of the rules to Era Systems Corporation (Era) that allowed operation of fixed position 76-77 GHz radar at Hartsfield-Jackson Atlanta International Airport.

A review of the two NPRMs shows many common links and introduces common questions that must be addressed. The 78-81 GHz NPRM discusses licensed use of the band for FOD. The 76-77 GHz NPRM discusses unlicensed use of the band for airport ground based vehicle motion monitoring. The Part 15 rules allow unlicensed use of the 76-77 GHz band for automotive radar. As the need for improved automotive safety systems increases, there is a requirement for increased bandwidth in order to meet certain requirements such as range resolution. Europe has responded by allocating the band 77-81 GHz for unlicensed use by automotive radar. Delphi suggests that the FCC give the same

consideration to the future use of the 77-81 GHz band in the United States under Part 15 rules to ensure automotive safety.

Delphi supported the use of 76-77 GHz for fixed radar on an unlicensed Part 15 basis only for the purpose of airport ground traffic monitoring. Delphi opposed opening the band for all non-airport fixed position applications due to the potential for interference with safety critical automotive systems. The system proposed by Era operated at essentially the same power levels as specified for automotive radar.

The system proposed by Trex in the 78-81 GHz band requests three times the bandwidth and 15 dB greater power than the system proposed by Era in the 76-77 GHz band and, further, 38 dB greater power than allocated for automotive SRR in Europe. Although Delphi has not studied the FOD application and cannot address the differences in system performance, Delphi is concerned that allowing use of the 78-81 GHz band on an unlicensed basis at the power levels proposed by Trex could make the band non-useable to future safety systems as already allowed in Europe.

In summary, Delphi believes that operation in the 78-81 GHz band for the specific application of FOD at airports should not pose a problem with other potential safety applications if approved as a licensed device operating under Part 90 of the Commission's rules at appropriate maximum power levels. With licensed use and airport restricted use, provisions can be made and enforced to minimize the potential for interference in the direction of public roadways. Delphi believes that the NPRMs concerning Trex operating under Part 90 of the Commission's rules, and Era operating under part 15 of the Commission's rules, should be coordinated and resolved concurrently. Additionally, when finalizing the two NPRMs, the Commission should also take into careful consideration the expansion of automotive safety systems into the 77-81 GHz band, as already allowed in Europe.

If you have any questions regarding this submission, please contact me at 248-813-2085.

Best regards,

Ragiemra Amato,
Manager Government/Technical Affairs
Delphi Automotive